

**Claims**

1. A non-calcined clay composite, comprising 50 to 90 wt% clay, 2 to 30 wt% lime, 4 to 48 wt% blast furnace slag, 0.04 to 0.9 wt% alkaline chemical, and water as a balance.
- 5        2. The non-calcined clay composite as set forth in claim 1, wherein the alkaline chemical is selected from the group consisting of NaOH, KOH, slaked lime ( $\text{Ca}(\text{OH})_2$ ),  $\text{CaSO}_4$ ,  $\text{CaCl}_2$ , NaCl, alum (alumstone), water glass (sodium silicate), and a mixture thereof.